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AUG 12 2015

Ref: 8EPR-N

William Avey, Forest Supervisor
Helena National Forest
c/o Allen Byrd, Team Lead
Telegraph Vegetation Project
2880 Skyway Drive
Helena, Montana 59602

Re: Draft Environmental Impact Statement for the Telegraph Vegetation Project; CEQ # 20150184

Dear Mr. Avey:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service's (USFS's) Draft Environmental Impact Statement (EIS) for the Telegraph Vegetation Project. Our comments are provided for your consideration pursuant to our responsibilities and authority under Section 102(2)(C) of the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act (CAA).

Project Background

The project area is located in the Helena National Forest about 15 miles southwest of Helena and 5 miles south of Elliston in Powell County, Montana, and includes a portion of the Jericho Mountain Inventoried Roadless Area (IRA). The Telegraph Vegetation Project is designed to be responsive to the mountain pine beetle (MPB) outbreak by ensuring diverse and sustainable forest stands and wildlife habitat in the future, improving conditions for fire suppression, recovering economic value of dead and dying trees, and maintaining and improving watershed values. The USFS has not identified a Preferred Alternative.

Alternatives identified in the Draft EIS include the following:

- Alternative 1 (No Action);
- Alternative 2 (Proposed Action) includes approximately 6,750 acres of vegetation treatments such as precommercial thinning, harvest, and prescribed fire (total treatment acreage includes about 4,330 acres of burning activity); 8.5 miles of temporary road construction; and 6 stream crossing improvements; and
- Alternative 3 (developed in response to scoping concerns related to wildlife, road construction, and the Jericho Mountain IRA) includes approximately 4,185 acres of vegetation treatments (including about 2,185 acres of burning activity), 3.4 miles of temporary road construction, and 9 stream crossing improvements. In addition, 30 miles of road decommissioning is proposed.

Comments and Recommendations

We appreciated the opportunity to provide scoping comments for this project in our December 1, 2009 letter. The Draft EIS provides detailed analyses of air and water resource conditions and potential project impacts. Our remaining recommendations are intended to further inform the decision to be made and the public's understanding of potential impacts to public health and the environment. Based on our review of the Draft EIS, the EPA's comments and recommendations focus on the following issues: (1) project design features, mitigation and monitoring and (2) water resources. These issues serve as the basis for the EPA's EC-2 rating discussed at the conclusion of this letter.

(1) Project Design Features, Mitigation and Monitoring

Throughout the Draft EIS, general reference is made to design features, best management practices (BMPs), and conservation practices that will be implemented to reduce project impacts on resources. The reader is repeatedly referred to various specialist reports in the project record for the details of these measures. Impacts to resources are determined to be negligible based on the assumption that all mitigation measures are appropriately implemented.

Recommendations: While we appreciate that impacts appear to be minimized by implementation of the design features and other project measures, the Draft EIS does not contain a compilation of the related measures. We strongly recommend that the Final EIS include a summary table of the design features, mitigation measures, BMPs and monitoring requirements that will be implemented to ensure protection of resources. Since the referenced specialist reports are not readily available to the public, it is extremely difficult for the reader to understand what measures the USFS will require or to ascertain the adequacy of these measures. One option to address this recommendation would be to expand Appendix B, Table B-2 Management Area Direction, to include this information.

We support the development of project design features, mitigation and monitoring measures to reduce the potential for water resource impacts. The inspection, maintenance and adjustment of BMPs will help protect groundwater and surface water resources. If the USFS has not already done so, we recommend the Final EIS consider the following mitigation measures:

- Use existing landing locations and roads when reasonable;
- Minimize landing size and design for proper drainage;
- Require revegetation of all disturbed areas with native seed mix within the same growing season of disturbance, and monitor revegetation efforts for five years to ensure success;
- Require special protections, such as buffer zones, for high quality riparian and wetland resources such as springs and fens;
- Specify steps to protect any range improvements from vegetation treatment activities;
- Monitor impacts from treatments proposed adjacent to high value water resources; and
- Monitor the breakdown of hydrophobic soils following prescribed burns.

We appreciate the detailed Draft EIS analysis and mitigation measures associated with proposed prescribed fire treatments. It is unclear whether additional project design features will be implemented to further reduce project air emissions. If the USFS has not already done so, we recommend considering the following measures:

- Limit idling of heavy diesel equipment and transportation vehicles;
- Require heavy diesel equipment to use cleanest available engines or retrofits with diesel particulate control technology;
- Maintain engines;
- Use low-sulfur or alternative fuels;
- Expand application area for dust abatement measures; and
- Implement detailed dust control plans particularly where dust is expected near occupied dwellings.

(2) Water Resources

The EPA considers protection of water resources to be among the most important issues to be addressed in the NEPA analysis for vegetation management activities. As outlined in the Draft EIS, most treatments contemplated under the action alternatives (e.g., harvest, thinning, prescribed fire, and road construction) have the potential to adversely impact aquatic resources, including surface and ground waters, wetlands, streams, riparian areas, and their supporting hydrology.

Public Drinking Water Supply Sources: The Draft EIS notes that one of the treatment objectives of the project is to reduce the likelihood of wildfire in the project area moving into the Tenmile Watershed, which provides a crucial water supply to the Helena Valley and is located just east of the project area.

Recommendations: The Montana Department of Environmental Quality (MDEQ) has conducted source water assessments for groundwater and surface water sources of public drinking water supplies. The EPA recommends that the Final EIS include a generalized map, appropriate for public dissemination, showing the generalized locations of all source water assessment and protection areas associated with public drinking water supplies both within the project area and in the adjacent Tenmile Watershed. Maps may be available from MDEQ or the EPA upon request. Please note that more specific maps, available from the MDEQ, should be utilized by the USFS when locating project activities. Please contact the MDEQ Source Water Protection Program Manager, Joe Meek, at 406-444-4806 or jmeek@mt.gov for more information. We also recommend that the Final EIS include a discussion of potential project impacts, design criteria and mitigation options for protecting these high value drinking water resources from potential project impacts.

In addition, the presence and handling of MPB-impacted trees has the potential to impact public water supplies if it leads to organic loading of area waterbodies. Organic matter has the potential to interact with disinfectants used in the drinking water treatment process to form disinfection byproducts, which are a human health concern. Organic loading may also decrease oxygen levels that can lead to the release of metals such as arsenic, manganese, and iron from sediments. The EPA recommends that the Final EIS assess the potential for organic loading impacts to drinking water treatment and supplies associated with any public water supply intakes in or downstream from the project area.

Wetlands/Riparian Areas: The Draft EIS describes areas of abundant wetland habitat in the project area. The reader is referred to the project record for data from a wetland survey conducted for this analysis which identified 23 wetlands in project treatment areas. It appears that no new riparian area surveys were conducted for this Draft EIS, but information is provided from previous analyses of grazing allotments in the project area. This information indicates that none of the riparian areas observed were

rated as properly functioning condition and nearly half were rated as non-functioning.

The wetlands typically found in mountain environments represent highly valuable upper montane and lower subalpine wetland ecosystems performing a variety of functions and values. The Executive Order 11990 – Protection of Wetlands (May 24, 1977) requires federal agencies to avoid to the extent practicable, long- and short-term adverse impacts associated with the destruction or modification of wetlands.

Fen wetlands provide important hydrological and water quality functions by improving water quality in headwater streams, and may support rare assemblages of aquatic invertebrates. They also provide critical ecological functions such as providing base flows to streams during late summer and/or drought periods. The U.S. Geological Survey has also determined that peat wetlands are especially efficient filters of metals dissolved in groundwater and surface water. The capacity to filter metals contributes to improved water quality by lowering dissolved metal content in streams (Owens, D.O., and Breit, G.N., 1995), which is particularly relevant to the project area regarding the water quality standard exceedances related to metals concentrations discussed below.

The EPA recognizes fen-type wetlands as ecologically critical in that they provide local and regional biodiversity. The U.S. Fish and Wildlife Service (USFWS) designated fen wetlands a Resource Category 1 with respect to the USFWS Peatland Mitigation Policy. The mitigation goal of USFWS Resource Category 1 is no loss of habitat values and the Peatland Mitigation Policy places the protection and avoidance of fen wetlands as a priority during Clean Water Act (CWA) Section 404 reviews. Further underlining the uniqueness and importance of fen wetlands in Montana, the U.S Army Corps of Engineers revoked the use of the majority of Nationwide Permits in peatlands/fen-type wetlands to protect this unique wetland type. In the EPA's view, these wetland ecosystems are, for all practical purposes, non-renewable and irreplaceable.

Recommendations: The EPA recommends that the Final EIS provide the wetland acreage in the project area, as well as a summary of the design features and BMPs that would be implemented to protect wetlands. In addition, based on information available from the Montana Natural Heritage Program, it appears that there may be fens in the project area, which may indicate the presence of high-functioning wetlands. Fen communities are very sensitive to hydrologic alternations and restoration is extremely challenging once function has been impaired. Due to the slow rate of accumulation of peat in fens, these ecosystems are generally considered to be irreplaceable. We recommend that the Final EIS include a description and acreage of fens within the project area and whether they would be impacted by project activities. If none exist, then we recommend that be noted in the Final EIS. Additionally, in accordance with the goal of no overall net loss of the nation's remaining wetland base for the Section 404 regulatory program, we strongly recommend that both direct and indirect impacts to these highly valued resources be avoided.

Water Quality: The Draft EIS includes descriptions of the Ontario Creek, Telegraph Creek, Mike Renig Gulch, and Little Blackfoot River-Hat Creek watersheds and discloses existing water quality conditions based on the 2012 State of Montana CWA Section 303(d) list. The Draft EIS states that numerous stream reaches are not meeting identified beneficial uses due to various impairments including metals, sedimentation/siltation, and alteration in streamside vegetative cover. Sources of these impairments include abandoned mine lands, grazing and forest roads.

The Draft EIS states that potential project impacts, such as increased sediment delivery to streams or wetlands, alteration of streambanks, and increased stream temperatures due to removal of streamside vegetation cover, will be minimized or eliminated based on implementation of project design features and BMPs, siting roads in upland areas away from streams, and road improvements to reduce/eliminate sites that allow sediment delivery to streams or wetlands and improve drainage. These measures will ensure that any sediment transport or increases in stream temperature will be negligible.

Recommendations: We recommend that the USFS analyze potential impacts to impaired waterbodies within and downstream of the planning area, including waterbodies listed on the most recent EPA-approved CWA Section 303(d) list, which in this case is 2014. The 2012 data utilized in the Draft EIS are outdated and will need to be updated to the 2014 MDEQ CWA 303(d) list for the Final EIS. We further recommend that the Final EIS include a map of the impaired waterbody segments within, or downstream of, the project area. Such a map is necessary to understand the relative proximity of treatment units and temporary roads to impaired waters and the likelihood of project activities contributing to or disturbing identified sources. One option to address this recommendation may be to revise Figures E-4 and E-5 to include this information.

Once the analysis is updated to include the 2014 MDEQ CWA 303(d) list, we recommend that the USFS coordinate with MDEQ if there are identified potential impacts to impaired waterbodies (in order to avoid causing or contributing to the exceedance of water quality standards). Where a TMDL exists for impaired waters in the area of potential impacts, pollutant loads should comply with the TMDL allocations for point and nonpoint sources. Where new loads or changes in the relationships between point and nonpoint source loads are created, we recommend that the USFS work with MDEQ to revise TMDL documents and develop new allocation scenarios that ensure attainment of water quality standards. Where TMDL analyses for impaired waterbodies within or downstream of the planning area still need to be developed, we recommend that proposed activities in the drainages of CWA impaired or threatened waterbodies be either carefully managed to prevent any worsening of the impairment or avoided altogether where such impacts cannot be prevented. In addition, if the Mike Renig Gulch watershed does not contain any impaired waterbodies, then we recommend it be noted in the Final EIS.

Soil Disturbance: We appreciate the Draft EIS detailed analysis of soil resources, including predictions of detrimental soil disturbance (DSD), particularly given the connection to potential water quality impacts that may result from accelerated surface erosion and sediment delivery. Starting on p. 586, Table 230 identifies acres of new DSD based on proposed vegetation treatment acreage. Several treatment units are predicted to exceed the USFS Region 1 Soil Quality Standard (SQS), which states that new vegetation management activities should not result in detrimental soil conditions on more than 15% of an activity area. To ensure compliance with the SQS, the USFS plans to require design features and BMPs.

Recommendations: The EPA recommends that the Final EIS include a summary table of the required design features and BMPs, in this case specific to soil resources protection. This information is particularly important given the predicted exceedance of the Region 1 SQS in several treatment units. If the USFS has not already done so, we also recommend requiring a minimum 100 foot setback from slopes greater than 30% to minimize soil disturbance.

Impacts from Proposed Roads: We appreciate that Figures E-4 and E-5 include the project area road network including segments proposed for maintenance, reconstruction, temporary

construction/obliteration, haul routes, and decommissioning. The Hydrology section of the Draft EIS notes that the design criteria that will apply for activities in or near wetlands are described in the Soil Specialist Report. The Hydrology section also acknowledges that both action alternatives propose a new temporary road (N01) with a channel crossing that would require approval from the State of Montana as well as the Corps for a CWA Section 404 permit. In addition, the Inventoried Roadless Areas section of the Draft EIS notes that prescribed fire is the only type of treatment proposed within the Jericho Mountain IRA.

Recommendations: Discharge of dredged or fill material into waters of the United States, including wetlands, is regulated under CWA Section 404. This permit program is administered jointly by the Corps and the EPA. Please consult with the Corps to determine the applicability of CWA Section 404 permit requirements to wetlands that would be impacted in the project area.

It is unclear if indirect impacts to supporting wetlands hydrology resulting from road cuts and fills were assessed, or if project design criteria would address these impacts. We recommend avoiding impacts to aquatic resources that are considered "difficult to replace" under the EPA's and the Corps' Final Rule for Mitigation for Losses of Aquatic Resources [33 CFR Parts 325 and 332; 40 CFR Part 230 (73 FR 19594, April 10, 2008)]. The rule emphasizes the need to avoid and minimize impacts to these "difficult-to-replace" resources and requires that any compensation be provided by in-kind preservation, rehabilitation, or enhancement to the extent practicable. We recommend restoration plans require that soil profiles and hydrology are re-established as much as possible to the original state. In addition, the EPA recommends the USFS consider Executive Order 11990 Protection of Wetlands, which requires that each agency provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for "managing federal lands."

In addition, the Draft EIS refers the reader to the project file for various specialists' reports that describe the design criteria and restrictions that will be implemented to minimize or eliminate impacts from roads to water resources, including wetlands/riparian areas. We recommend that the Final EIS include a summary table of these measures. It appears that the USFS is taking every step to ensure such protections, but it is very difficult to determine the adequacy of required measures without a summary compilation. If the USFS has not already done so, the EPA recommends considering protection of aquatic resources from road-related impacts by implementing the following measures:

- Locate roads away from streams and riparian areas where possible;
- Locate roads away from steep slopes, landslide prone areas, and erosive soils;
- Minimize the number of road stream crossings;
- Construct unavoidable road stream crossings during periods of low flow to avoid fish spawning and incubation periods, and/or dewater relevant stream segments prior to construction;
- Provide adequate road drainage and erosion control to avoid routing sediment to streams;
- Use bottomless or textured bottom culverts if possible;
- Design roads to allow for natural drainage patterns;
- Develop a monitoring plan and schedule to assess the effectiveness of road obliteration and/or decommissioning after project completion; and
- Require prompt re-vegetation of disturbed areas and temporary roads. Monitor for five years to ensure successful re-vegetation.

Lastly, we recommend that the Final EIS include a discussion regarding how the proposed prescribed fire treatment units will be accessed in the IRA.

Other Considerations

Documentation of the U.S. Fish and Wildlife Service's Recommendations: The Draft EIS identifies the Canada lynx, an Endangered Species Act-listed threatened species, as likely to be adversely affected by the proposed project. Implementing the proposed treatments under the action alternatives would reduce snowshoe hare habitat and the quality of lynx denning and foraging habitat. In addition, since lynx appear to den away from roads, the proposed temporary roads may displace lynx from otherwise available denning habitat. Alternative 2 proposes more acreage for vegetation treatments and more miles of temporary roads than contemplated under Alternative 3.

We recognize that the USFS will discuss its determinations and findings with the USFWS. Documentation of the USFWS's consultation and concurrence, along with its recommendations for project design criteria, mitigation, and monitoring will be a valuable addition to the Final EIS.

Preferred Alternative: The Draft EIS does not identify the USFS's Preferred Alternative. As required under Section 1502.14 of the Council on Environmental Quality's Regulations for Implementing the National Environmental Policy Act, the Preferred Alternative will need to be identified in the Final EIS unless another law prohibits expression of such a preference. It seems reasonable and judicious to include such an analysis in the Final EIS to ensure that the public and interested stakeholders have an opportunity to comment on the Preferred Alternative during the Final EIS review rather than waiting for the USFS objection period. We recommend that the USFS's Preferred Alternative is clearly described in the Final EIS, or an explanation be provided as to why it is not identified.

Closing

Consistent with Section 309 of the CAA, it is the EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. Based on the procedures the EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed project, the EPA is rating the Draft EIS as Environmental Concerns – Insufficient Information (EC-2). The "EC" rating indicates that the EPA review has identified environmental impacts that need to be avoided in order to fully protect the environment. The "2" rating indicates that the EPA has identified additional information, data, analyses, or discussion that we recommend for inclusion in the Final EIS. Because a Preferred Alternative was not identified in the Draft EIS, each of the action alternatives are receiving an EC-2 rating (we do not rate the no action alternative). A description of the EPA's rating system can be found at: http://www2.epa.gov/nepa/environmental-impact-statement-rating-system-criteria.

Although the action alternatives received an EC-2 rating in this review, we do not view them as equivalent based on the Draft EIS analysis. As outlined above, due to decreased treatment acreage, fewer miles of new temporary roads, more miles of decommissioned roads, and more stream crossing improvements, Alternative 3 would have reduced impacts to water resources when compared to Alternative 2.

We appreciate the opportunity to participate in the review of this project, and are committed to working with you as you prepare the Final EIS. If we may provide further explanation of our comments during this stage of your planning process, please contact me at 303-312-6704, or your staff may contact Amy Platt, at 303-312-6449 or platt.amy@epa.gov.

Sincerely,

David Farnsworth

for Philip S. Strobel
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation